Assessment Plan Summary

The unit assessment plan that follows addresses standards for a unit on electricity in an AP Physics class. The unit begins with a series of formative assessments that helps students develop the skills necessary to identify and support a claim using evidence and logical reasoning. These skills are broken down into the ability to identify a claim, use evidence effectively, and link evidence in to the claim using sound logical reasoning. After developing these individual skills, many of the content related tasks will come much easier as it requires students to synthesize all those smaller process skills into the larger one. The additional bonus of incorporating those skills into the beginning of the unit is that it will allow students to use those developed skills in the remainder of the unit. This is critical because the remaining tasks require students to use the process standards in order to demonstrate proficiency in the content standards.

First of all, the coin battery task asks students to construct a battery out of nickels and pennies. They then choose a variable to investigate and explain the effect of that variable on electric potential. This tasks truly shows students the importance of the interactions between charged particles to generate a force. In order to effectively explain the assignment, they will have to effectively communicate that relationship in writing by providing a claim, evidence, and reasoning for their investigation.

The remaining tasks follow similar structures with students designing and creating investigations or structures to illustrate their understanding of the various content standards. The following chart illustrates how each tasks fits with the standards for this unit: